

## A. Course Handout (Version 1.2)

Institute/School/College Name	Chitkara University Institute of Engineering & Technology		
Department/Centre Name	Department of Computer Science & Engineering		
Programme Name	B.E (CSE)		
Course Name	CO-OP Project at Industry (Module-1)	Session	2025-26
Course Code	22CS411	Semester/Batch	7 <sup>th</sup> /2022
Lecture/Tutorial (Per Week)	0-0-0	Course Credit	12
Course Coordinator Name	Dr. Anshu Singla		

### 1. Scope & Objective of the Course:

This course provides students with hands-on experience in developing real-world software solutions for industry partners. Students will work individually to analyse requirements, design, implement, and deliver a functional project as per industry/client requirements. This course also provides a wide scope of learning & understanding and experience the essential practical tasks emphasised in their professional study. This course also to provide opportunities to apply their acquired skills and knowledge after on boarding the industry. Other objectives are:

- Apply theoretical knowledge to practical, industry-relevant problems.
- Gain experience with professional software development practices and tools.
- Develop teamwork and communication skills in a project-based environment.
- Learn to manage project timelines, resources, and deliverables.
- Understand industry standards for code quality, testing, and documentation.
- Enhance problem-solving and critical thinking skills in a real-world context.

### Course Learning Outcome:

CLO1: To identify and formulate problem statement based key principles of software development practices and tools used in industry.

CLO2: To analyze project requirements to determine appropriate software solutions and break down complex problems into manageable components for team-based development.

CLO3: To evaluate all feasible project solutions progress against timelines and deliverables along with code quality and unit testing procedures.

CLO4: To design the software solutions and integrate the modules that meet industry/client requirements.

CLO5: To organize complete documentation for project phases—initiation, planning, execution, monitoring, and closure as per industry standards

### CLO-PO Mapping Grid

Course Learning Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CLO1	H	L			L	L	M		H	H	M	M
CLO2	H	H		L	M	L	M		H	M	H	M
CLO3		M	M	M	M	M	L	M	H	H	H	M
CLO4	H		H	H	H	M		M	H		M	M
CLO5					M	M	M	H	H	H		H

### 2. Recommended Books (Reference Books/Text Books):

**B01:** 'Practical Tips for Software-Intensive Student Projects' by Damith C. Rajapakse, 3<sup>rd</sup> Edition, 2008  
Free available at <https://www.e-booksdirectory.com/details.php?ebook=2129>

**B02:** 'Intelligent Vision Systems for Industry' by Bruce G. Batchelor, Springer-Verlag, 2002. Free available at <https://www.e-booksdirectory.com/details.php?ebook=1126>

**B03:** 'Design: Creation of Artifacts in Society' by Karl T. Ulrich, 1<sup>st</sup> Edition University of Pennsylvania 2011. Free available at <https://www.e-booksdirectory.com/details.php?ebook=8780>

**B04:** 'Comparative Studies of Programming Languages' by Joey Paquet, Serguei A. Mokhov, Cornell University, Free available at <https://www.e-booksdirectory.com/details.php?ebook=4993>

### 3. Other readings & relevant websites

S.No.	Websites
1.	<a href="https://www.sih.gov.in/">https://www.sih.gov.in/</a>
2.	<a href="https://www.udemy.com">https://www.udemy.com</a>

### 4. Recommended Platform and Tools: AS PER INDUSTRY REQUIREMENT

### 5. Course Plan: NOT APPLICABLE

### 6. Delivery/Instructional Resources: AS PER INDUSTRY REQUIREMENT

### 7. Action plan for different types of learners: NOT APPLICABLE

### 8. Evaluation Scheme & Components:

Evaluation Component	Type of Component	No. of Assessments	Weightage of Component	Mode of Assessment
Component 3	Internal Evaluation*	02	40%	Online
Component 3	End Term Examinations	01	60%	Online
<b>Total</b>		<b>100%</b>		

### 9. Details of Evaluation Components:

Evaluation Component	Description	Timeline of Examination	Weightage (%)
Component 3	Internal Evaluation 1(Synopsis Submission)	28.07.2025-31.07.2025	15%
Component 3	Internal Evaluation 2(Progress Report 1)	22.09.2025-27.09.2025	25%
Component 3	End Term Examination	24.11.2025-05.12.2025	60%

### 10. Format of Evaluation Components:

Sl.No	Component	Marks
1	Synopsis/Abstract/FAs	15
2	Mid-Term Evaluation/STs	25

3	End Term Evaluation	60
5	<b>Total</b>	<b>100</b>

**11. Syllabus of the Course: NOT REQUIRED****This Document is approved by:**

<b>Designation</b>	<b>Name</b>	<b>Signature</b>
Course Coordinator	Dr. Anshu Singla	
Head Academic Delivery	Dr. Anshu Singla	
Associate Dean	Dr. Darpan Anand	